107 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

107.02 Permits, Licenses and Taxes

The Department requires the Contractor to comply with all local, tribal, county, state and federal regulations, laws, and ordinances, and bear any costs or inconveniences associated with those requirements. Regulations or permit requirements unfamiliar to either the Contractor or the Resident Engineer do not relieve the Contractor of the obligation to comply. The Special Provisions will often identify some of the requirements, but they should not be construed to be the only requirements.

Local ordinances such as noise limitations, haul restrictions, and permit fees are usually the most cumbersome for the Contractor. For example, most cities require a connection fee and permit when a Contractor taps into a city waterline. Some cities require a permit to use and haul explosives. Usually permits associated with construction and installation activities such as hauling, dust control, and connecting to utilities are the Contractor's responsibility. Specialized permits that could not be foreseen by the Contractor at bid time and royalties are usually the Departments responsibility.

Permits required to construct the project in the first place, such as 404 Permits for the Corps of Engineers or utility relocation clearances, are usually the Department's responsibility.

Contractors are responsible for paying all existing federal, state, county, and local sales taxes associated with the work. This includes future taxes or tax increases passed into law before bid opening. Any new taxes or tax increases passed after bid opening will be paid by supplemental agreement.

ADOT Fuel Tax and Vehicle Registration

Every year millions of dollars in fuel taxes and vehicle registration fees go uncollected. When collected, this money goes to funding the construction and maintenance of the state's roads and bridges. Although ADOT's Motor Vehicle Division is responsible for collecting fuel tax and registration fees, Inspectors and Project Supervisors, as part of the ADOT team, should assist in the enforcement process whenever possible.

VEHICLE REGISTRATION INFORMATION

All vehicles must have Arizona license plates, or an International Registration Plan (IRP) registration indicating Arizona as an authorized State.

EXCEPT IN VERY LIMITED SITUATIONS, TEMPORARY OR SHORT-TERM ARIZONA REGISTRATION PERMITS ARE NOT ACCEPTABLE FOR ADOT PROJECT WORK.

No vehicle registration is required for equipment that operates exclusively off Arizona highways.

Should you have any questions about vehicle registration, please call Licensing Services (602) 7126775.

107.04 Federal Aid Participation

Some of ADOT's highway projects are partially funded by the U.S. Government. When federal funding is involved, a project has additional federal contract requirements that both the Contractor and ADOT must meet. These additional requirements are numerous and contained in the project Special Provisions.

The requirements that have the biggest effect on administering a project are summarized below.

Disadvantaged Business Enterprise Program

Most federal aid projects require that a certain percentage of the contract work be given to a certified disadvantaged business such as a minority-owned or woman-owned business. The Contractor is responsible for selecting a disadvantaged business enterprise (DBE) firm and subcontracting a portion of the work to them. Some DBE firms are Material Suppliers, so the Contractor may purchase a portion of their materials for use on the project. The Contractor is required to submit DBE affidavits when submitting a bid. These affidavits list the DBE firms the Contractor intends to use and certifies that the DBE goal for the project will be met.

At the preconstruction conference the Contractor is required to submit copies of all DBE Subcontractors, purchase orders, or quotes to the Resident Engineer (see Subsection 108.03). Copies of these should be forwarded to ADOT's Civil Rights Office.

During construction, the Resident Engineer should monitor the Contractor's use of DBE firms to ensure that the DBEs are performing their committed share of the project work. The Field Office should have a copy of the DBE's approved subcontract or quote for materials. The Resident Engineer's job is to ensure the Contractor lives up to the terms of the subcontract or quote. DBE compliance and work should be discussed at each weekly meeting when DBEs are on the project. Any questionable situations or apparent non-compliance situations should be reported to ADOT's Civil Rights Office.

Compliance means meeting the numerical percentage shown in the Special Provisions and using all the firms shown on the DBE affidavit. The Contractor is not free to drop or replace DBE firms without the approval of the Civil Rights Office. The Special Provisions explains the requirements for changing DBE firms on the project.

At the end of the project, the Resident Engineer must ensure that the Contractor submits the required "Certification of Payments to DBE Firms Affidavit." The certification must be forwarded promptly to the Civil Rights Office.

Bulletin Board Requirements

Certain postings and notices are required on all projects that receive federal aid. These are supplementary postings beyond the usual postings required in a place of business. The Resident Engineer is cautioned to differentiate between those postings required by a business and those postings required to be on a construction project bulletin board. The Resident Engineer should see that the following provisions (as included in the contract) are posted prominently by the Contractor on the bulletin board.

- Fraud Poster (Form PR-1022) required by Title 18 of the United States Code
- EEO Poster (Form GPO 1984 O. - 438-915) in English and Spanish
- Wage Rate Information Poster (DOL poster WH-1321)
- The Wage Decision listed in the project Special Provisions
- EEO Policy of the Contractor and major Subcontractors
- List of safety officers for the Contractor and major Subcontractors
- The Notice of Intent for Storm Water Discharges (EPA form 3510-618-98)

Additional recommended postings include:

- name and telephone number of Contractor's EEO policy enforcement officer;
- emergency contract telephone numbers; and
- OSHA postings and other project safety and security information.

The Resident Engineer should see that the Contractor furnishes a bulletin board of sufficient size to accommodate all of the required posters: generally, a minimum area of 12 square feet (1 meter square) is sufficient. The bulletin board should be suitable for outside installation and covered with a transparent window for the purpose of displaying required posters on the project.

The various required posters can be found on the Bulletin Board Posters link on the Construction Group homepage.

The Fraud Poster, required by Section 1020, Title 18, United States Code, must be displayed during the course of the work. The poster is normally displayed on the Contractor's and Subcontractor's bulletin boards, in the engineering office, and in the project laboratory. This poster points out the consequences of impropriety on the part of any Contractor's or Department's employees working on the project. The Deputy State Engineer's name and address appear on the poster, as does the name and address of the Division Administrator of the Federal Highway Administration (FHWA).

NOTE: The size, location, lighting, and visibility are not specified in the contract, except as noted in the quotations below (taken from the federal requirements in a typical special provision):

"Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the state highway agency setting forth the provisions of this non-discrimination clause."

"The wage determination...shall be posted at all times by the Contractor and their Subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers."

On-The-Job Training

Most federal aid projects have a requirement for on-the-job training of construction trade workers. The training must be part of a recognized apprenticeship program approved by the Department. The Contractor will usually submit a training program with a list of apprentices at the preconstruction conference.

During construction, the Project Supervisor or Inspector should verify that apprentices are:

- enrolled in an approved training program;
- performing the type of work normally performed by their craft (i.e., carpenter apprentices should not be tying rebar or operating heavy equipment); and
- being supervised by a journeyman or journeywoman of the same craft.

Apprentices are paid less than Davis-Bacon wage rates and each hour an apprentice works is partially paid for by the Department. The project Special Provisions establishes the minimum number of training hours the Contractor must provide as well as the hourly rate at which the Department will subsidize on-the-job training.

Liaison with the FHWA

The Phoenix office of the FHWA oversees all federal aid projects in Arizona. Federal aid projects can be divided into two categories:

1. *Certification Acceptances* (CA) are projects in which the FHWA has very little involvement except at the final inspection and acceptance. Most projects off the Interstate Highway System are CA projects. CA projects have an “A” after the end of the federal aid project number.

2. *Non-certification Acceptances* (Non-CA) projects are projects in which the FHWA oversees the contract administration activities of the Department. These projects are typically the interstate highway projects and some other specialized or unusual projects.

In recent years the FHWA has given the state more responsibility in administering federal aid funds. FHWA staff members conduct fewer reviews and inspections for specific projects than previously, focusing instead on reviewing operational processes. ADOT's own Construction Operations Section has been charged with ensuring compliance with federal requirements, including conducting periodic field inspections.

Local Government Projects and Certification Acceptance Projects

Local government projects require special consideration. Coordination for project development is provided by ADOT's Local Governments Section.

Project sponsors may be cities, counties, or Indian tribes. Funds for local government project construction are provided by the FHWA with matching funds provided by the sponsor. Usually no state funds are involved.

Almost all local government projects are administered under Certification Acceptance Procedures (CAP). The CAP sets forth the policies to be used by ADOT in the administration of projects financed with federal aid highway funds. An "A" after the parentheses in the federal aid project number identifies CAP projects.

Under CAP, ADOT is responsible for design review and approval of:

- Project Plans and Special Provisions;
- environmental, right-of-way and utility clearance certification;
- project bid package preparation;
- advertisement for bids;
- award of contract; and
- construction inspection.

Construction of CA projects is accomplished in accordance with ADOT's Standard Specifications. Materials are tested and approved in accordance with ADOT's "Sampling Guide Schedule" and the specific requirements employed on all federal aid projects within the state.

On any specific project, construction inspection and contract administration will normally be under the direction of an ADOT Resident Engineer. The sponsor's employees working under the self-administered program, or a Consulting Engineer working as a contract administrator may perform inspection and administration for the Resident Engineer.

The following are required construction practices on all certification acceptance projects.

1. Construction Quality Assurance

   Construction will be in accordance with all standards, specifications, plans and contract documents of ADOT.

   The Resident Engineer or the Construction Operations Section will conduct random quality assurance field reviews as needed. Random inspections should be conducted at the beginning and near the end of each project, as well as throughout the term of the project at 30- to 45-day intervals.

Field reviews will be of a general nature. A report on the inspection should be filed consisting of:

- a description of work underway;
- a report on the quality of the work from a visual observation of the activities;
- spot checking of project documentation; and
- whenever possible, inclusion of a measurement of some item of work.

Copies of the random inspection reports should be filed in the project file at the project office and the Construction Operations Section.

2. Contract Modifications

Change orders, force accounts, minor alterations, and other activities, which may increase project costs must be discussed as required by normal ADOT procedures, including notification of the Project Manager. On local government projects, they must be discussed with the sponsor, the applicable Council of Government Representative, and the Local Government Section. The FHWA does not need to be contacted when there is a change. Only changes in the project scope should be discussed with the FHWA.

Changes in project costs resulting from design errors and requests from the Contractor for design changes must be coordinated through the local government and their design consultant. The local government design consultant is required to be available for post-design services during project construction. Local government design consultants should be invited to attend Partnering Workshops and the Preconstruction Conference prior to the start of the project construction.

3. Final Inspections

Final inspections must be attended by representatives of the sponsor, the District Engineer's Office, and the FHWA.

Often, local government projects have special clauses in the Intergovernmental Agreement (IGA) to address effects of construction on existing or future facilities. These clauses call for special considerations or performance by ADOT during the work. The Resident Engineer must contact the Joint Projects Agreements Branch to obtain a copy of the IGA. After discussing any special clauses with the Intergovernmental Agreement Coordinator, the Resident Engineer should establish a system to track and account for any special work by ADOT or the Contractor, as required by the agreement. Field Reports must be notified of the requirements.

Every courtesy must be extended to the representatives of the local governments. Not only do the cities, counties, or Indian tribes have a financial interest in the project, the project will serve their communities for many years. The representatives should inspect the work and give the Resident Engineer counsel; however, the Resident Engineer is not obligated to accept and implement suggestions given. In case of conflicting thoughts between the Resident Engineer and the local government representative, the matter should be referred to the Project Manager and the District Engineer.

Non-certification Acceptance Projects

The FHWA is an active partner with ADOT in the administration of Non-CA projects. The FHWA Area Engineer will make periodic inspections of both the project work and the project inspection records (including test results

and material certifications).

The FHWA Area Engineer needs to be contacted and concur on all supplemental agreements before an agreement is reached with the Contractor. Also the FHWA Area Engineer is invited to the partnering and prebid conferences, as well as to the final inspection.

It is important to involve the FHWA Area Engineer in any escalation hearings beyond the District level. Since the Area Engineer recommends federal aid participation on all contract changes, early involvement of the Area Engineer in a contract dispute is highly recommended. Early involvement will help avoid any misunderstandings or courses of action that may result in the FHWA's withholding federal aid participation.

107.07 Sanitary, Health, and Safety Provisions

Safety is an integral part of construction. Every construction activity has its own safety element. Because most safety issues are inseparable from the construction activity, safety is discussed throughout this manual in conjunction with the different activities.

The importance of a safe environment cannot be overemphasized. Most industrial injuries stem from a combination of two causes: an unsafe physical condition and an unsafe act.

The unsafe physical condition is often a product of the environment; the general conditions at the site of the work, the equipment and materials used, or the process employed. Improvement in the environment can help eliminate the unsafe physical condition and improve working conditions.

The unsafe act can usually be traced to a momentary lapse of attention, inadequate training, or inexperience. Construction sites are unpredictable places, and employees must be constantly aware of what is going on around them. Most construction accidents are due to unsafe acts.

The rest of this subsection will introduce the various safety regulations that govern on a construction site and indicate where to find additional information on safety.

OSHA Safety and Health Standards for the Construction Industry (29 CFR Part 1926)

These safety standards apply to all construction sites in Arizona. The standards are published yearly in a book distributed by the Industrial Commission of Arizona, Division of Occupational Safety and Health (ADOSH). This book (see references) is the safety bible for all construction sites. The Industrial Commission sells these standards at a nominal price, so there is no reason why every Inspector and Resident Engineer should not have a copy.

The standards are identical to the U.S. OSHA standards and are adopted by the Industrial Commission, which is responsible for safety enforcement within the state.

To help you understand OSHA standards and navigate your way through them, the following is a basic description of how the standards are organized.

Subparts

The standards are broken up into 26 subparts from A to Z categorizing the different type of construction and safety activities. There are subparts on demolition, steel erection, fire protection, and trench safety, to name a few.

Sections

Each subpart is made up of one or more sections that are the key elements of the standards. Each section is labeled with the prefix "1926"—the federal standard number. The standard number is followed by a decimal point and then the section number (ex., 1926.500). Every section has a title describing what the section is about.

Every paragraph in the OSHA standards has an alphanumeric identifier. This is done to make it easier to reference or quote specific safety provisions. The labels may seem a little confusing at first. Some paragraphs have a letter in front. Others are labeled with a number, while still others are labeled with a Roman numeral.

The paragraph labeling is based on a hierarchy or tier. The more complicated the section, the more tiers or different sub-levels OSHA will use to identify paragraphs (provisions) within the section. The hierarchy is best explained by the following example:

OSHA Standard 1926.57(c)(3)(iii)(B)

.57—This is the section number in the OSHA Standards.

(c)—This is the first sublevel, which is labeled with lowercase letters (a - z).

(3)—Each of the first sublevels can be further subdivided into a second sublevel, with numerals (1 - 99).

(iii)—Each second sublevel can be further subdivided into a third sublevel, labeled by lowercase Roman numerals (i - xcix).

(B)—If the third sublevel needs to be further subdivided into a fourth sublevel, uppercase letters are used to identify the fourth sublevel (A - Z).

All sections within OSHA are labeled in this manner. However, not all sections may have as many sublevels as shown in the example. For instance, 1926.704 has only five paragraphs, labeled (a) through (e). No further subdividing is needed. The subdividing depends on how complicated a particular safety standard is.

Understanding how the safety standards are structured and labeled is an important first step in becoming proficient in their use. We suggest that each Inspector spend about one-half hour just skimming the safety standards to understand how they are structured and organized. Eventually, Inspectors should be able to navigate through them and find provisions as easily as ADOT's Standard Specifications.

Hazardous Materials

Inspectors and other ADOT field personnel have a right to know about any hazardous material they may come in contact with at the work place. The Contractor is required by law and by the contract specifications to make available material safety data sheets (MSDS) to everyone at the project site. Refer to Section 1926.59 of OSHA standards for further information on right-to-know requirements.

When hazardous materials are spilled, accidentally discharged, or encountered at the project site, Subsection 107.07 describes how ADOT wants the situation handled. When ADOT's field staff is notified of a hazardous material situation, the following actions should be taken:

- ensure all workers are removed from the contaminated area;
- ensure the area is sealed off to the extent that no one can become contaminated; and
- call the Resident Engineer.

Depending on the seriousness of the situation and how much the public is affected, additional contacts should be made with the:

- District Office,
- ADOT Safety & Health Section, and
- ADOT Traffic Operations Center.

Resident Engineers and Lead Inspectors should have a copy of the Emergency Response Guide published by the U.S. Department of Transportation. This book helps identify hazardous materials, the potential danger of each material, and some basic precautionary measures that can be taken. However, experts should handle the more serious hazardous material incidences. Your job should be to isolate and seal off the area containing the hazardous material until qualified help arrives.

ADOT Safety & Health Section

ADOT has full-time Safety Technicians who solely deal with safety issues and regulations. They can be a valuable resource in interpreting OSHA standards and can help you identify safety hazards at the project site.

ADOT Safety & Health Section has a full set of OSHA standards, including hazardous materials regulations and OSHA safety brochures.

ADOT Safety Section should be notified when:

- an employee of ADOT or the Contractor is seriously injured at the project site;
- there is a chronic safety problem suspected at the project site which is not being corrected; and
- dangerous amounts of hazardous materials are spilled or encountered.

OSHA Enforcement

Resident Engineers are empowered to shut down unsafe operations at the project site. However, some judgment is needed in deciding whether to shut down unsafe activities or to let them continue until corrective action can be taken. Here are some questions to consider as the Resident Engineer and Project Supervisor arrive at their decision.

1. Is an unsafe condition away from the main site activities? Can the area be isolated or barricaded until the condition is made safe?

2. Most serious accidents are caused by unsafe acts. Are the workers' activities jeopardizing their own or other people's safety? How high is the risk of serious injury?

3. Assess the risk to the general public. Could the Contractor's operation cause property damage or injury to those not associated with the construction?

4. Call the Contractor's superintendent and safety supervisor to the site. Review the situation with them. Involve one of ADOT's safety consultants, if available.

5. Can something be done to make the hazard temporarily safe? Can someone be assigned to closely monitor the hazard full-time while people are at risk?

6. Consult the OSHA standards as well as any available safety experts. Do the standards or previous

enforcement actions offer any direction on what to do?

Answering these questions will help prepare the Resident Engineer for making a well-thought-out, carefully deliberated decision; shutting everything down at the slightest safety infraction is too extreme.

For example, an unsecured, infrequently used, 10-foot (3-meter) high ladder at a remote corner of the job site is probably not enough to warrant a stop work order. Even if the Contractor does not rectify the problem for a few days, the most a Resident Engineer should do initially is to strongly warn the Contractor in writing about the hazard.

On the other hand, workers found in an unshored 10 foot (3-meter) deep vertical trench is a serious safety violation, which obviously warrants an immediate stop work order and a meeting with the Contractor.

Unfortunately most safety hazards lie between these two extremes. Making a good decision that balances strict adherence to safety standards with the perceived risk of injury can be difficult. For those difficult decisions, the best words of advice are "**err on the side of safety!**"

Industrial Commission

The Industrial Commission's Division of Occupational Safety and Health (ADOSH) is divided into two sections. The enforcement section makes site inspections, issues violation notices, levees fines, and shuts down unsafe projects. Resident Engineers should call the enforcement section as a last resort when chronic safety problems cannot be quickly resolved with the Contractor.

The other section is a consultation section that advises business owners, such as Contractors, how to improve worker safety. This section has safety consultants who inspect job sites and point out safety hazards and violations. These Inspectors do not issue citations but are there to advise on safety issues. When there have been chronic safety violations, some Resident Engineers have required Contractors to invite these Inspectors to the site instead of calling the enforcement section.

107.08 Public Convenience and Safety

Traffic Disruptions

Much of ADOT's construction work is situated in and interfaces with traffic. As a result, there is often a conflict between how to construct the work and how to least disrupt traffic. Contractors sometimes want to perform the work in the most efficient manner, but at the expense of disrupting traffic. The Resident Engineer must then decide how much of a traffic disruption is tolerable.

A Resident Engineer's number one concern is public welfare and safety. This is the Resident Engineer's ethical duty, both as a Professional Engineer and as a public servant. Traffic restrictions have two impacts on the public. First, they are an inconvenience that causes travel delay, extra fuel consumption, vehicle wear, economic loss, and driver stress. Second, they are a safety hazard. The restrictions eliminate some of the safety features of the road (i.e., shoulders), require quicker adjustments in driving behavior, and expose drivers to unusual situations—all result in higher vehicle accident risk.

In addition to decisions regarding safety, the Resident Engineer must carefully consider and investigate all the alternatives and weigh the impacts on public safety and the project work. For instance, shutting down the road for a day or two may be a significant disruption and inconvenience to the traveling public, but it may be preferred to several weeks of lane closures that might be more of a disruption and cause more accidents. On the other

hand, a series of lane closures may be preferred to a full road closure. This situation can occur when previous full closures have resulted in accidents, frustrated motorists behaving erratically, and very long traffic lines. In deciding what to do, the Resident Engineer's priorities should be:

1. risk to public safety (accident risk in particular),
2. major public inconvenience, and
3. construction efficiency.

The risk of even one serious accident involving personal injury seems too high a price to pay for construction efficiency, especially when other feasible alternatives are available. However, assessing the risks ahead of time requires judgment, experience, and sometimes expert advice. Resident Engineers are often pressured by the Contractor to favor construction efficiency. The Resident Engineer should also draw on the experience of traffic control experts including the Regional Traffic Engineer, a city or county Traffic Engineer, and the Contractor's own traffic control coordinator and barricade Subcontractor in weighing the alternatives.

Sometimes there is no feasible alternative, and the disruption and accident risk must be endured. However, the Resident Engineer should be the one to make the decision. Do not remain passively silent and let the Contractor do what he or she thinks is appropriate. The Resident Engineer should proactively approve or disapprove each closure or traffic restriction, even when there is a previously approved traffic control plan.

Liaison with Local Government Officials, Business Owners, and Residences

During construction, phasing of the site work and public information are crucial elements of ADOT's desired coordination effort with the surrounding community. Construction sequencing, local access, and traffic control should be outlined at the preconstruction conference and at other critical milestones during construction. The local government officials should be kept informed of these matters at least monthly or more often so all affected parties can be alerted to ongoing construction impacts.

The Resident Engineer should hold periodic meetings with local business owners/managers and neighborhood associations, preferably at one of the business establishments or at a local community center or school. The Resident Engineer should invite the Contractor and all affected businesses and residences to attend. The Resident Engineer should conduct the meetings and have the Contractor's representative explain the construction schedule and answer questions about ongoing work. The Contractor needs to feel a sense of accountability to the community concerning project progress and construction impacts.

When construction is completed, the Resident Engineer should contact each business and resident to ensure that any cleanup or property damage issues are resolved. If there has been a significant involvement by local individuals or groups, then a letter expressing appreciation for their participation is recommended.

Local Access and Signing

Adjacent businesses should be contacted to establish the level of access and hours of high use. Signs stating "Business Access" or "Driveway Entrance" may be used to denote access driveways to individual businesses or business complexes. Other special construction signing may be identified on a project-by-project basis. Signs should not identify business names and must not be furnished or altered by the businesses. Special signs can be made by ADOT if unavailable from the Contractor.

Traffic control plans should require that local cross streets have access across construction activities whenever possible. This cross street access should be a smooth, well-graded subgrade material or base course material

with a paved surface where feasible.

Provisions should be made to have in-place, smooth subgrade or base course material across construction activities for at least one-half the width of all driveways to businesses, commercial, and institutional properties. The minimum width should be 20 feet (6 meters). If possible, driveway grades should be maintained at less than a 10:1 slope.

Whenever possible, open trenches for utilities or culvert work must be provided with steel-plate crossings for cross streets and driveways.

Stranded Motorists

Occasionally some of ADOT's customers need immediate help. ADOT field staff may give stranded motorists limited assistance.

This assistance includes:

- notifying the Department of Public Safety (DPS) of the stranded motorist;
- telephoning a roadside service for the stranded motorist;
- making phone calls to get in touch with one relative or acquaintance; and
- providing drinking water and other first-aid assistance.

The assistance does not include:

- phone calls to more than one relative or acquaintance;
- calling a towing company;
- running errands; and
- transporting stranded motorist, their passengers, or their cargo, unless there is an immediate safety hazard.

Safety Plan and Safety Supervisor

The safety plan a Contractor submits at the preconstruction conference must be site specific or customized for the project. For example, a company-wide plan that covers such topics as fall protection, crane safety, and confined spaces should not be included as part of the safety plan for an overlay or chip seal project. On the other hand, information on how the company performs general safety practices—such as fire prevention, hazardous material communication, and accident reporting—should be included in any safety plan.

Exhibit 1-8 is a suggested outline for a Contractor's safety plan. As the Contractor develops the plan, safety issues specific to the type of work should be combined with general safety practices so a coordinated, unified plan is developed. In most cases, only slight revisions to a Contractor's company safety plan should be needed. The work of Subcontractors should be included in the plan.

The Resident Engineer should review and approve the safety plan. ADOT's Safety and Health Section can review safety plans upon request. Also they will make recommendations about whether to approve the plan and any changes needed to make the plan acceptable.

SAFETY PLAN

Project: _____

_____

_____

1. Contractor's Safety Officer Assigned to Project

Name: _____
Address: _____

_____

_____

Phone: _____

Instructions - Fill in appropriate blanks as indicated. A resume of the assigned officer should accompany completed plan. The resume should indicate the officer's experience in construction safety pertaining to requirements of this project.

Responsibilities and Authority

Instructions - Indicate the duties of the safety supervisor, what he or she will do on a routine basis, what authority the supervisor has to take corrective actions including stopping work.

2. Contractor Corporate Safety Director

Name: _____
Address: _____

_____

_____

Phone: _____

Instructions - Fill in appropriate information as indicated

3. Contractor Corporate Safety Philosophy Pertaining to Project

Instructions - State Corporate Safety Philosophy pertaining to project.

Exhibit 1-8a. Suggested Safety Plan

4. Contractor Accident and Loss Prevention Program

   Instructions -Provide a copy of the accident prevention manual, employee safety handbook, and method of documenting that the employees have received and read. Describe safety-monitoring methods, procedures for prohibiting use of machinery, tools, material, or equipment which is not in compliance. Provide a description of the method used of verifying qualified equipment/machinery operators. Include specific safety measures for the type of construction operations anticipated at the project site.

   Describe or submit a copy of hazardous material handling program. This program should outline methods and procedures for handling hazardous material should a spill occur during the refueling process or from other circumstances.

5. Site Security and Loss Prevention

   Instructions -Describe procedures to prevent theft, vandalism, and other losses at the construction site. Discuss how the public will be protected from hazards at the site during both working and non-working hours.

6. Contractor Safety Training and Education Program

   Instructions - Described method(s) used to instruct employees in the recognition of hazards, avoidance of unsafe conditions, and respective documentation procedures. Submit a copy or describe the Hazardous Material Communication Program. In the event of encountering “Confined/Enclosed Space Entry Program”, explain or provide a copy of the Contractor’s “Trenching & Excavation Program.”

7. Contractor Medical/First Aid Services Program

   Instructions - Submit “Emergency Action Plan” stating First Aid Services and provisions for providing medical care to employees. List telephone numbers for medical services to be used. List person(s) who have a valid certificate in First Aid training from the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence. State method of communicating the “Emergency Action Plan” to employees; where the plan will be located for employee reference in time of emergency, where medical supplies will be located, and the contents of “Emergency Medical Kits.”

8. Contractor Fire Prevention/Protection Program

   Instructions - Describe the fire protection and prevention program to be utilized throughout all phases of construction, repair, alteration, or demolition.

Exhibit 1-8b. Suggested Safety Plan

9. Contractor Personal protection Equipment Program

   Instructions - Describe the Personal Protection Program that is required by a Contractor of his or her employees and Subcontractors' employees in general application and any personal protection items that are unique to the project (i.e., for fall protection, confined spaces, etc.). Describe the minimum personal protective equipment for visitors. Explain methods the Contractor will use to monitor employee-owned equipment to ensure its adequacy, including proper maintenance and sanitation.

10. Contractor Personal Health/Hygiene Program

    Instructions - Provide information as to health and sanitation to be provided for employees of Contractor and Subcontractors. This applies to Potable Water/Non-Potable Water, toilets, sewered/non-sewered, and sanitation methods required for these.

11. Emergency Contacts Procedures

    Instructions - List emergency contacts for both the Contractor and ADOT; include police, fire, and industrial injury clinics. Indicate where the contact listing will be posted.

12. Contractor Accident Reporting of Recordable Injuries/Fatalities

    Instructions -Explain methods of reporting Recordable Injuries/Fatalities, of Contractor/Subcontractor personnel; include copies to ADOT on a monthly basis.

13. Contractor OSHA Inspections Record

    Instructions - Describe policy of handling OSHA Inspections on the project. ADOT's Resident Engineer and the Safety and Health Section must be notified immediately that an OSHA Compliance Officer is on the project. Information as to the outcome of any such inspection should be passed on to the ADOT Resident Engineer and ADOT Safety and Health Section in a timely manner.

Should there be any questions concerning information required, contact ADOT Safety and Health Section at (602) 712-7744.

Exhibit 1-8c. Suggested Safety Plan

Accident Notification

When any workplace accidents occur seriously injuring ADOT personnel or any construction worker, ADOT's Safety and Health Section must be notified immediately.

ADOT Safety is the contact for workers compensation notification. The District should be notified as well. ADOT's Community Relations Office should be notified if the media covers any on-site rescue operation.

Accidents involving injuries to many people at the site or injuries involving the traveling public require more extensive notification requirements. The Deputy State Engineer's Office issues a yearly "Accident/Incident Notification" memo. This memo describes the notification procedures for various types of accidents and incidents on the State Highway System. The Resident Engineer or Project Supervisor is required to follow this notification procedure when accidents or incidents occur on the project. As a recommended alternative, ADOT's Traffic Operations Center can be contacted 24 hours a day via radio or telephone, and their staff will handle all the required contacts.

All serious project accidents should be documented regardless of who is involved (a construction worker, an ADOT employee, or the general public). The amount of detail and the form of the documentation depends on the seriousness of the accident and ADOT's *potential* liability. Documentation can take the form of:

- diary entries,
- completed accident forms,
- police reports,
- photographs,
- video,
- drawing and sketches,
- measurements, and
- current traffic control plans in use.

ADOT's Risk Management Section can provide guidance regarding the documentation requirements for a particular incident.

Temporary Fencing and Protecting the Project Site

One of the intents of this subsection is to make our construction sites reasonably safe after working hours. Inspectors and Project Supervisors need to actively enforce temporary fencing requirements. During non-working hours, curious adults, transients, lost travelers, children, and others must be reasonably prevented from entering the more dangerous areas of the construction site. Temporary fencing will probably not stop the determined trespasser, but fencing should prevent people from accidentally entering a dangerous area and serve as a warning to those who try.

Children are impulsively drawn to construction sites and often do not understand the dangers involved. Under the "attractive nuisance" legal doctrine, the Contractor and the Department must reasonably protect trespassing children from hazards at the project site. Temporary fencing is an effective method of keeping children away from attractive nuisances. In addition, the Contractor should take other precautions (i.e., removing ladders, blocking openings, locking equipment, etc.) to make the site reasonably child- and teenager-proof.

Temporary fencing should be supplemented with barricades, flashing lights, flags, and other traffic control devices to direct motorists, bicyclists, and pedestrians away from the hazard.

In heavily traveled areas where trespassing is a chronic problem, “no trespassing” signs should be placed in key areas around the site. To be legally enforceable the signs should read:

State Property
No Trespassing
Violators Will Be Prosecuted
ARS 13-1502A.1 ARS 13-1503A ARS 13-1504A.1

The signs are usually 12 x 24 inches (300 x 600 millimeters) in size with black lettering on a white background. They should be posted at all possible entrances to the project site or in the more hazardous areas. Good coverage is important to make the signs enforceable. These signs can be ordered through the Regional Signing and Striping Supervisor or can be purchased by supplemental agreement from a signing Subcontractor.

Inspectors should not allow the use and amount of temporary fencing to be minimized when public safety is at risk. Temporary fencing can become an acute problem for the Contractor during trenching or mass excavating. Arrange to meet with the Contractor ahead of earthwork operations so that both of you can discuss public safety and the precautions that should be taken.

Sometimes temporary fences can be eliminated by laying back slopes or by suitably covering excavations. Erecting permanent fencing where it will not conflict with the Contractor’s operations is another important method of protecting the public. The Inspector should communicate public safety requirements to the Contractor ahead of time, then work with the Contractor to minimize temporary fence use.

107.10 Use of Explosives

See Subsection 203-3.03(C) of this manual.

107.11 Protection and Restoration of Property and Landscape

For erosion control and temporary drainage measures to protect adjacent properties refer to Subsection 104.09 of this manual.

Contractors sometimes use private property or adjacent public land as a staging area, construction yard, stockpile area, or for improved access to the project. Regardless of the reason, the Contractor must have written permission from the property owner or the operating public agency (Subsections 106.09 and 107.11).

It does not matter where the property is located or who owns it. If the Contractor needs to use the property in order to carry out or accomplish any activities for the project, then written permission is needed.

The written permission should clearly describe what the property is to be used for. This is important, because many times the Department has been drawn into disputes between the property owner and the Contractor as to what he or she can and cannot do on the property. For instance, if the property owner is allowing the Contractor to store a few materials, the Contractor should not be setting up a fully equipped construction office on the property.

The Contractor must furnish evidence that the owner is satisfied with the cleanup and restoration of the property at the completion of the project. Unless the owner states otherwise, private property should be cleaned and restored to its original condition.

Lack of written permission to use private or public property is grounds for withholding part of the Contractor's monthly progress payment (5 to 10 percent range). In addition, any material stockpiled on private or public property should not be paid for until written permission is received.

107.12 Forest Protection

The primary intent of this subsection is to minimize the environmental impacts of construction activities on Forest Service land. This includes preserving the natural condition of the land and the vegetation in and adjacent to the project.

When working on Forest Service property, the Forest Service strictly regulates the Department's activities, including those of our Construction Contractor. This Subsection, as well as requirements in the project Special Provisions, identifies what the Department and the Contractor must do when working on Forest Service land.

The Department has a memorandum of understanding with the U.S. Forest Service on how we will cooperate with them in meeting their environmental objectives. The Roadside Development Section has a copy of this document.

The Department has a good working relationship with the Forest Service. The Resident Engineer, Project Supervisor, and Inspectors can help sustain this relationship by ensuring the Contractor meets the environmental requirements and concerns listed in the Project Plans, Special Provisions, and Standard Specifications. The Department needs the continued cooperation of the Forest Service as the state continues to grow. How the Resident Engineer and inspection staff handle the Forest Service concerns on each project does have a long-term effect on our relationship with the Forest Service.

If the Contractor enters into a special-use permit with the Forest Service, a copy should be furnished to the Resident Engineer.

107.14 Insurance

All ADOT Contractors are required to carry both general liability insurance and automobile insurance with a minimum limit of $1 million per incident. They are also required to carry workers compensation insurance.

A certificate of insurance is included in the executed contract. ADOT's Contracts and Specification (C&S) Section will check to make sure all the insurance requirements are met. However, during the course of construction the policy may expire. As a result, it is important for the Resident Engineer to check the insurance certificate in the executed contract for the policy expiration date. If the policy has expired, make sure the Contractor obtains a new policy. The field office and Accounts Receivable office should get a copy of the new insurance certificate. To assist the field office, if the Contractor's insurance policy expires within a few months of the execution of the contract, C&S will send a letter to the Resident Engineer advising of the expiration date.

Contractors must not be allowed to work without insurance. Lack of proper insurance is grounds for stopping all work on the project and withholding progress payments.

Third-Party Damages and Claims

Motorists, pedestrians, local residences, neighboring businesses, and others who come in contact with construction activities are sometimes harmed by those activities. They could be injured, their property could be damaged, or they could suffer some other type of loss.

Although the Contractor's insurance protects the Department from third-party damage claims, it is a good idea to document any third-party accidents or incidences. Documenting accidents or incidences that occur on weekends can be difficult. However, a police report can be obtained for the more serious accidents. Moreover, any time you spend documenting an incidence, even after the fact, can potentially save the Department thousands of dollars.

The level of documentation should depend on:

- the seriousness of the accident;
- the potential liability for the Department and the Contractor;
- the documentation effort by others such as the Contractor or the police; and
- how much first-hand information you can get about the accident.

For example, an Inspector's documentation of an accident that occurred over a holiday will probably be just a note or short paragraph in a daily diary. The police report should be the primary source of documentation. On the other hand, a serious traffic accident in the construction zone occurring during work hours should be well documented including photographs and sketches. In documenting a traffic accident or worker injury, try to avoid duplicating much of what would be found in a police or accident report. Instead, refer to those reports in your documentation and supplement their information.

It is important for the Resident Engineer to investigate any accidents involving third-parties in order to detect and correct any unsafe conditions or hazardous construction operations.

When the District or the Field Office receives calls from the public regarding property damage or injury caused at an ADOT construction site, the caller should be sent form RMO15, Notice of Claim Against the State of Arizona. Do not admit any liability for the caller's alleged damages. Instead, tell the caller that in order to review any damage claim, the form must be completed and returned to the addresses listed on the bottom of the form.

You may tell callers that they have up to six months to file the claim after the date of the accident or incident. Do not refer them to the Contractor, even though the Contractor has third-party liability insurance. The claimant must still file with ADOT in order to protect his or her legal rights should the Contractor's insurance company refuse the claim. ADOT's Risk Management Office will forward the claim to the Contractor for processing.

107.15 Contractor's Responsibility for Utility Property and Services

General

Arizona state law (ARS 40-360.21-.29) requires anyone excavating in public streets, alleys or utility easements to first identify the location of all underground facilities in the vicinity of the excavation. The Contractor is responsible for contacting the Blue Stake Center and locating all utilities before excavating. See the Special Provisions for the Blue Stake phone number, and known utility conditions and arrangements. The Resident Engineer and Project Supervisor should have a copy of *How To Locate Underground Utilities Before You Dig*, published by the Arizona Blue Stake, Inc.

The preconstruction conference should deal with known conditions and discuss the arrangements for cooperation between the Contractor and the utility company.

On projects in which utility companies relocate their own utilities, the Resident Engineer should obtain copies of all permits. The Field Office is responsible for inspecting this work and ensuring that all requirements and conditions of the permit are fulfilled. The results of the inspection should be provided to ADOT's Utility and

Railroad Engineering Section.

Notifications

When unforeseen problems are encountered or when a Contractor serves notice of a potential claim due to utility conflicts, the Resident Engineer should follow these procedures.

1. At the first indication of a utility-related problem, the Field Office must notify the District and the Utility & Railroad Engineering Section.

2. Utility & Railroad Engineering will provide the Field Office with copies of all related documents, agreements, permits, and utility company commitments, etc.

3. The project office should notify the appropriate utility company representative by certified mail of the potential claim. This will allow the utility company the opportunity to eliminate or mitigate potential damages by accelerating relocation work, rescheduling the work to avoid the conflict, or adjusting the location to avoid a conflict, etc. The Resident Engineer should contact the Utility and Railroad Engineering Section for appropriate utility company representatives to contact.

4. If the Contractor files notice under 104.03, any negotiations conducted with the Contractor should involve the utility company. Input from the utility company should be sought concerning proposed claim settlements or supplement agreements to which the utility company has liability.

5. Under the terms of the construction contract, the Contractor's claim is filed with the Department, not the utility company. The Resident Engineer should encourage the Contractor and the utility company to resolve the problem between themselves. However, it is important for the Resident Engineer to receive the details of any settlement agreement in order to avoid possible ripple effects or future claims against the Department.

6. The project office should send any utility claim settlements paid by change order, force account, or supplemental receiving report to the Utility and Railroad Engineering Section for review and processing.

7. If the Department determines that there is a utility company liability, the Utility and Railroad Engineering Section will seek recovery. If the company does not reimburse the Department, the documentation may be transferred to the Attorney General's Office for legal action.

Like any other potential dispute, the Resident Engineer and Inspectors are advised to keep good records of conditions relating to unforeseen problems.